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#### § 399.120

transportation received from the Board under Title IV of the Act, until suspended, amended, or terminated as provided under such title.

#### Subpart K—Policies Relating to Certificate Duration

# $\S\,399.120$ Duration of certificates in limited-entry markets.

All certificate authority that the Department grants to U.S. air carriers in

carrier selection proceedings will be awarded in the form of experimental certificates of five years' duration pursuant to section 401(d)(8) of the Federal Aviation Act. This provision does not alter or amend permanent certificates issued prior to January 1, 1985.

[Doc. No. 43403, 51 FR 43188, Dec. 1, 1986]

# CHAPTER III—COMMERCIAL SPACE TRANSPORTATION, FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

(Parts 400 to 499)

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#### SUBCHAPTER A—GENERAL

#### PART 400—BASIS AND SCOPE

Sec. 400.1 Basis. 400.2 Scope.

AUTHORITY: Secs. 3, 6, 13, and 21, Pub. L. 9 98-575 (49 U.S.C. App. 2601 note).

Source: 53 FR 11013, Apr. 4, 1988, unless otherwise noted.

#### § 400.1 Basis.

The basis for the regulations in this chapter is the Commercial Space Launch Act of 1984, and applicable treaties and international agreements to which the United States is party.

#### §400.2 Scope.

These regulations set forth the procedures and requirements applicable to the authorization and supervision of all space launch activities conducted from United States territory or by United States citizens. The regulations in this chapter do not apply to amateur rocket activities or to space activities carried out by the United States Government on behalf of the United States Government.

# PART 401—ORGANIZATION AND DEFINITIONS

Sec

401.1 The Office of Commercial Space Transportation.

401.3 The Director of Commercial Space Transportation.

401.5 Definitions.

AUTHORITY: Sec. 4, Pub. L. 98–575 (49 U.S.C. App. 2601 note); 49 CFR 1.68.

SOURCE: 53 FR 11013, Apr. 4, 1988, unless otherwise noted.

# § 401.1 The Office of Commercial Space Transportation.

The Office of Commercial Space Transportation, referred to in these regulations as the "Office," is a unit within the Office of the Secretary of Transportation and is located in the Department of Transportation Headquarters, 400 Seventh Street, SW., Washington, DC 20590.

# § 401.3 The Director of Commercial Space Transportation.

The Office is headed by a Director appointed by the Secretary of Transportation to exercise the Secretary's authority to license and otherwise regulate commercial space launch activities and to discharge the Secretary's responsibility to encourage, facilitate and promote commercial space launches by the United States private sector.

#### § 401.5 Definitions.

As used in this chapter—

Act means the Commercial Space Launch Act of 1984, Pub. L. 98–575.

Amateur rocket activities means launch activities conducted at private sites involving rockets powered by a motor or motors having a total impulse of 200,000 pound-seconds or less and a total burning or operating time of less than 15 seconds, and a rocket having a ballistic coefficient—i.e., gross weight in pounds divided by frontal area of rocket vehicle—less than 12 pounds per square inch.

Director means the Director of the Office of Commercial Space Transportation, or any person designated by the Director to exercise the authority or discharge the responsibilities of the Director

Launch means to place, or attempt to place, a launch vehicle and/or payload in a suborbital trajectory, in Earth orbit in outer space, or otherwise in outer space.

Launch activity means the launch of a launch vehicle and any payload, the operation of a launch site, or both.

Launch vehicle means any vehicle constructed for the purpose of operating in, or placing a payload in, outer space, and any suborbital rocket.

Licensee means the person authorized by a license to conduct specified commercial launch activities and responsible for conducting such activities in conformance with applicable requirements.

Mission means the objective to be accomplished by a proposed launch and

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includes the general plan for achieving that objective.

*Operation of a launch site* means the conduct of approved safety operations at a permanent site to support the launching of vehicles and payloads.

Payload means an object which a person undertakes to place in outer space by means of a launch vehicle, and includes subcomponents of a launch vehicle specifically designed or adapted for that object.

*Person* means any individual and any corporation, partnership, joint venture, association, or other entity organized or existing under the laws of any State or Nation.

Safety operations means the personnel, equipment, facilities, documented plans and procedures, and any other resource needed for safe preparation and launch of a launch vehicle and its payload.

State and United States when used in a geographical sense, mean the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, The United States Virgin

Islands, Guam, and any other commonwealth, territory, or possession of the United States; and

United States citizen means:

(a) Any individual who is a citizen of the United States;

- (b) Any corporation, partnership, joint venture, association, or other entity organized or existing under the laws of the United States or any State; and
- Any corporation, partnership, (c) joint venture, association, or other entity which is organized or exists under the laws of a foreign nation, if the controlling interest in such entity is held by an individual or entity described in paragraph (a) or (b) of this definition. Controlling interest means ownership of an amount of equity in such entity sufficient to direct management of the entity or to void transactions entered into by management. Ownership of at least fifty-one percent of the equity in an entity by persons described in paragraph (a) or (b) of this definition creates a rebuttable presumption that such interest is controlling.

#### SUBCHAPTER B—PROCEDURE

# PART 404—REGULATIONS AND LICENSING REQUIREMENTS

#### Subpart A—General

Sec.

404.1 Scope.

404.3 Filing of petitions to the director.

404.5 Action on petitions.

#### Subpart B-Rulemaking

404.11 General.

404.13 Petitions for extension of time to comment.

404.15 Consideration of comments received.

404.17 Additional rulemaking proceedings.

404.19 Hearings.

AUTHORITY: Secs. 8 and 13, Pub. L. 98–575 (49 U.S.C. App. 2601 note).

SOURCE: 53 FR 11013, Apr. 4, 1988, unless otherwise noted.

#### Subpart A—General

#### § 404.1 Scope.

Pursuant to sections 8 and 13 of the Act, this part sets forth the procedures for issuing regulations to implement the Act and for eliminating or waiving requirements of Federal law otherwise applicable to the licensing of commercial space launch activities.

## § 404.3 Filing of petitions to the director.

- (a) Any interested person may petition the Director to issue, amend or repeal a regulation, to eliminate as a requirement for a license any requirement of Federal law applicable to commercial launch activities, or to waive any such requirement in the context of a specific application for a license.
- (b) Each petition filed under this section shall:
- (1) Be submitted in duplicate to the Documentary Services Division, Attention Docket Section, Room 4107, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590:
- (2) Set forth the text or substance of the regulation or amendment proposed, the regulation to be repealed, or the li-

censing requirement to be eliminated or waived;

- (3) In the case of a petition for a waiver, explain the nature and extent of the relief sought;
- (4) Contain any facts, views, and data available to the petitioner to support the action requested; and
- (5) In the case of a petition for a waiver, be submitted at least 60 days before the proposed effective date of the waiver unless good cause for later submission is shown in the petition.
- (c) A petition for rulemaking filed under this section shall contain a summary, which the Director may cause to be published in the FEDERAL REGISTER, which includes:
- (1) A brief description of the general nature of the action requested; and
- (2) A brief description of the pertinent reasons presented in the petition for instituting the rulemaking.

#### § 404.5 Action on petitions.

- (a) *General.* No public hearing, argument or other proceeding is held on a petition before its disposition under this section.
- (b) Grants. In the case of a petition for a waiver, the Director may grant the waiver if the Director determines that the waiver is in the public interest and will not jeopardize public health and safety, the safety or property, or any national security or foreign policy interest of the United States. In all other cases, if the Director determines that the petition contains adequate justification, the Director initiates a rulemaking action under Subpart B of this part.
- (c) Denials. If the Director determines that the petition does not justify initiating rulemaking action or granting the waiver, the petition is denied.
- (d) *Notification.* Whenever the Director determines that a petition should be granted or denied, the petitioner is notified of the Director's action and the reasons supporting it.

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#### Subpart B—Rulemaking

#### §404.11 General.

(a) Unless the Director finds, for good cause, that notice is impractical, unnecessary, or contrary to the public interest, a notice of proposed rulemaking is issued and interested persons are invited to participate in proceedings related to each substantive rule proposed.

(b) Unless the Director determines that notice and comment is necessary or desirable, interpretive rules, general statements of policy, and rules relating to organization, procedure, or practice are issued as final rules without notice or other proceedings.

(c) In the Director's discretion, interested persons may be invited to participate in the rulemaking proceedings described in § 404.19 of this Subpart.

## § 404.13 Petitions for extension of time to comment.

(a) Any person may petition the Director for an extension of time to submit comments in response to a notice of proposed rulemaking. The petition shall be submitted in duplicate not less than three days before expiration of the time stated in the notice. The filing of the petition does not automatically extend the time for petitioner's comments.

(b) The Director grants the petition only if the petitioner shows a substantive interest in the proposed rule and good cause for the extension, and if the extension is in the public interest. If an extension is granted, it is granted as to all persons and is published in the FEDERAL REGISTER.

## § 404.15 Consideration of comments received.

All timely comments are considered before final action is taken on a rule-making proposal. Late filed comments may be considered to the extent possible, provided they do not cause undue additional expense or delay.

# § 404.17 Additional rulemaking proceedings.

The Director may initiate any additional rulemaking proceedings, if necessary or desirable. For example, the Director may invite interested persons

to present oral arguments, participate in conferences, appear at informal hearings, or participate in any other proceedings.

#### §404.19 Hearings.

(a) Sections 556 and 557 of Title 5, United States Code, do not apply to hearings held under this part. As a fact-finding forum, each hearing held under this part is nonadversarial and there are no formal pleadings or adverse parties. Any rule issued in a proceeding in which a hearing is held is not based exclusively on the record of the hearing, but on the entire record of the rulemaking proceeding.

(b) The Director designates a representative to conduct any hearing held under this part. The General Counsel designates a legal officer for the hearing.

# PART 405—INVESTIGATIONS AND ENFORCEMENT

Sec

405.1 Monitoring of licensed and other activities.

405.3 Authority to modify, suspend or revoke.

405.5 Emergency orders.

405.7 Civil penalties.

AUTHORITY: Secs. 14, 17 and 19, Pub. L. 98-575 (49 U.S.C. App. 2601 note).

Source: 53 FR 11014, Apr. 4, 1988, unless otherwise noted.

# § 405.1 Monitoring of licensed and other activities.

Each licensee shall allow and cooperate with Federal officers or employees or other individuals authorized by the Director to observe licensed activities, including launch sites, production facilities or assembly sites used by any contractor or a licensee in the production or assembly of a launch vehicle and in the integration of a payload with its launch vehicle. Such observations are conducted in order to monitor the activities of the licensee or contractor at such time and to such extent as the Director considers reasonable and necessary to determine compliance with the license or to carry out the Director's responsibilities pertaining to payloads for which no Federal license, authorization, or permit is required.

## § 405.3 Authority to modify, suspend or revoke.

- (a) Upon application by the licensee or upon the Office's own initiative, the Office may modify a license issued under this chapter if the Office finds that the modification is consistent with the requirements of the Act.
- (b) If the Office finds that a licensee has substantially failed to comply with any requirement of the Act, any regulation issued under the Act, the terms and conditions of a license, or any other applicable requirement, or that public health and safety, the safety of property or any national security or foreign policy interest of the United States so require, the Office may suspend or revoke any license issued to such licensee under this chapter.
- (c) Unless otherwise specified by the Office, any modification, suspension or revocation made by the Office under this section:
  - (1) Takes effect immediately; and
- (2) Continues in effect during any review of such action under Part 406 of this chapter.
- (d) Whenever the Office takes any action under this section, the Office immediately notifies the licensee in writing of the Office's finding and the action which the Office has taken or proposes to take regarding such finding.

#### § 405.5 Emergency orders.

The Office may immediately terminate, prohibit or suspend a licensed launch or launch site operation if the Office determines that—

- (a) Such launch or operation is detrimental to public health and safety, safety of property, or any national security or foreign policy interest of the United States; and
- (b) The detriment cannot be eliminated effectively through the exercise of other authority of the Office.

#### § 405.7 Civil penalties.

(a) Pursuant to section 19 of the Act, any person found by the Office, after notice and opportunity to be heard on the record in accordance with section 554 of Title 5, United States Code, to have violated a requirement of the Act, a regulation issued under the Act, or any term, condition or restriction of any license issued or transferred by the

- Office, shall be liable to the United States for a civil penalty. Each day of a continuing violation shall constitute a separate violation. The amount of such civil penalty shall be assessed by the Office by written notice. The Office may compromise, modify, or remit with or without conditions, any civil penalty which is subject to imposition or which has been imposed under this section.
- (b) If any person fails to pay a civil penalty assessed against such person after the penalty has become final or if such person appeals an order of the Office, and the appropriate court has entered final judgment in favor of the Office, the Office shall recover the civil penalty assessed in any appropriate district court of the United States.
- (c) For purposes of conducting any hearing under this section, the Office may:
- (1) Issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, documents, and other records;
- (2) Seek enforcement of such subpoenas in the appropriate district court of the United States; and
- (3) Administer oaths and affirmations

# PART 406—ADMINISTRATIVE REVIEW

Sec.

406.1 Hearings.

406.3 Submissions; oral presentation.

406.5 Administrative law judge's recommended decision.

AUTHORITY: Sec. 12, Pub. L. 98-575 (49 U.S.C. App. 2601 note).

Source: 53 FR 11015, Apr. 4, 1988, unless otherwise noted.

#### § 406.1 Hearings.

- (a) Pursuant to section 12 of the Commercial Space Launch Act, the following are entitled to a determination on the record after an opportunity for a hearing in accordance with section 554 of Title 5, United States Code:
- (1) An applicant for a license and a proposed transferee of a license regarding any decision to issue or transfer a license with conditions or to deny the issuance or transfer of such license;

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(2) An owner or operator of a payload regarding any decision to prevent the launch of such payload;

(3) A licensee regarding any decision to suspend, modify, or revoke a license, or to terminate, prohibit, or suspend any licensed launch activity; and

- (4) A person found by the Office to have violated a requirement of the Act, a regulation issued under the Act, or any term, condition or restriction of any license issued or transferred by the Office if the Office seeks civil penalties.
- (b) An administrative law judge will be designated to preside over any hearing held under this part.

#### § 406.3 Submissions; oral presentation.

(a) Determinations under this part will be made on the basis of written submissions unless the administrative law judge, on petition or on his or her own initiative, determines that an oral presentation is required.

- (b) Submissions shall include a detailed exposition of the evidence or arguments supporting the petition.
- (c) Petitions shall be filed as soon as practicable, but in no event more than 30 days after issuance of the Office's decision or finding under § 406.1.

# § 406.5 Administrative law judge's recommended decision.

- (a) The recommended decision of the administrative law judge shall be reviewed by the Director, who shall make the final decision on the matter at issue. The Director shall make such final decision within thirty days of issuance of the recommended decision.
- (b) The authority and responsibility to review and decide rests solely with the Director and may not be delegated.

#### SUBCHAPTER C-LICENSING

#### PART 411—POLICY

Sec.

411.1 General.

411.3 Review procedures.

411.5 Safety approval.

411.7 Mission approval.

411.9 Information requirements.

AUTHORITY: Secs. 3, 5 and 6, Pub. L. 989–575 (49 U.S.C. App. 2601 note).

SOURCE: 53 FR 11015, Apr. 4, 1988, unless otherwise noted.

#### §411.1 General.

The Office of Commercial Space Transportation may issue and transfer licenses authorizing launches, the operation of launch sites, or both.

#### §411.3 Review procedures.

(a) The evaluation of license requests for unmanned launches involves two reviews, Safety Review and Mission Review, designed to address in the most effective and least burdensome manner the two general areas of Federal concern: (1) the efficacy of the proposed safety operations to support safe preparation and launch of a launch vehicle and any payload; and (2) significant issues affecting United States national security interests, foreign policy interests, or international obligations which might be associated with the proposed launch. These reviews may be conducted independently of each other and in whichever order, sequential or concurrent, is more appropriate to the needs of the applicant.

(b) Requests for licenses authorizing the operation of a launch site are reviewed on the basis of the applicant's capability to operate a facility where safety operations are conducted on a continuing basis as support for the launching of a specified class of launch vehicles.

#### §411.5 Safety approval.

(a) Applicants proposing to conduct all of their own safety operations at a private launch site must demonstrate that they possess the resources needed for safe preparation and launch of a launch vehicle and any payload to be carried by such vehicle. In these circumstances, a comprehensive review of the applicant's proposed safety operations must be performed in order to determine whether safety approval can be granted.

(b) If an applicant proposes to launch from a Federal range, as the Act encourages, it is the Office's view that reliance on safety-related launch property and services found at these ranges is an appropriate means of assuring that the applicant's launch activities can be conducted safely. As a general matter, a commercial launch site operated under the authority of a license issued by the Office should also be capable of providing such an assurance of safety. If an applicant proposes to contract for the services of a Federal range or a private launch site operated under the authority of a license issued by the Office, safety approval will ordinarily be given once the applicant has been accepted by a range or site capable of handling the launch activity proposed. All launch licenses issued under these circumstances shall be conditioned by the requirements that the applicanť:

(1) Comply with all specified safety requirements and procedures of the range or launch site in question and

(2) Inform the Office of and obtain approval for any planned or proposed deviations from or alternatives to such requirements or procedures.

#### §411.7 Mission approval.

(a) General. Mission approval is granted unless some element of the proposed launch poses a threat to U.S. national security or foreign policy interests, constitutes a hazard to public health and safety or safety of property, or is inconsistent with international obligations of the United States. The Office shall work with applicants to correct or eliminate any defect in a proposal which impedes granting mission approval.

(b) Payloads. A proposal to launch any foreign payload or a payload not covered by existing FCC or NOAA regulation must be reviewed in consultation with other appropriate Federal

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agencies in order to determine that the launch of such payload will not jeopardize public health and safety, safety or property, or any national security or foreign policy interest of the United States. The Office, when requested to do so, shall provide payload operators or owners with this determination in advance of a launch license request or request for mission approval. Subsequent reviews of payloads within the same category shall be considered on a routine basis and shall focus on new or distinctive elements of the specific payload to be launched.

#### §411.9 Information requirements.

The Office shall make available current compilations of the basic information an applicant is required to submit in order to initiate an appropriate review of any proposed commercial launch activity subject to the Office's authority. These information requirements are not intended to be all-inclusive and the submission of the required information does not, in itself, demonstrate the qualifications of an applicant. The nature of individual proposals may require the submission of additional information.

#### PART 413—APPLICATIONS

Sec.

413.1 Scope.

413.3 Pre-application consultation.

413.5 Application.

413.7 Confidentiality.

413.9 Review of applications.

413.11 Modifications.

413.13 Issuance of license.

413.15 Terms and conditions of license.

413.17 Certain rights not conferred by license.

413.19 Substantial and significant changes in information furnished to the Office.

AUTHORITY: 49 U.S.C. app. 2601 note.

Source: 53 FR 11016, Apr. 4, 1988, unless otherwise noted.

#### §413.1 Scope.

The regulations in this part prescribe the application procedures common to licensing all commercial space launch activities. The regulations applying exclusively to launch licenses are contained in Part 415 of this subchapter.

#### §413.3 Pre-application consultation.

Applicants are encouraged to consult with the Office of Commercial Space Transportation at the earliest possible planning stages. Such consultation may reveal potential problems with a proposal and allow changes to be made when they are less likely to result in significant delay or costs to the applicant.

#### §413.5 Application.

- (a) Form. Applications shall be in writing and filed in duplicate with the Office of Commercial Space Transportation, S-50, 400 Seventh Street, SW., Washington, DC 20590. Attention: Applications Review Branch.
- (b) *Types.* Applications to the Office may request issuance or transfer of a license authorizing a launch or the operation of a launch site. Applications may also be made, separately and in advance of a license application, requesting an approval or determination that must be secured before a license can be issued or transferred.
- (c) Signature. Applications shall be signed as follows:
- (1) *For a corporation:* By an officer authorized to act for the corporation in licensing matters.
- (2) For a partnership or a sole proprietorship: By a general partner or proprietor, respectively; or
- (3) For an association or other entity: By a principal executive officer.

[53 FR 11016, Apr. 4, 1988, as amended at 56 FR 41068, Aug. 19, 1991; 58 FR 3827, Jan. 12, 1993]

#### §413.7 Confidentiality.

- (a) Information or data submitted to the Office may be designated as confidential by the person or agency furnishing such data or information.
- (b) A request that information or data be treated confidentially should be made in writing at the time the information is submitted and should state the period of time for which confidential treatment is desired.
- (c) A request for confidential treatment will be associated with previously submitted information to the extent that it is practicable in light of prior distribution of such information.

(d) Information requested to be treated confidentially must be clearly marked with an identifying legend such as "Proprietary Information" or "Confidential Treatment Requested." Where this marking proves impracticable, a cover sheet containing the identifying legend must be securely attached to the compilation of information for which confidential treatment is requested.

(e) Pursuant to section 9(c) of the Act, information for which confidential treatment has been requested, as provided above, or information that qualifies for exemption under section 552(b)(4) of Title 5, United States Code, will not be disclosed unless the Director determines that the withholding of such data or information is contrary to the public or national interest.

#### §413.9 Review of applications.

(a) Each application shall contain the information prescribed by the Office in order to initiate an appropriate review of the proposed launch activity. This information can be obtained by writing to the Office of Commercial Space Transportation, S-50, 400 Seventh Street SW., Washington, DC 20590, or by calling (202) 366-5770.

(b) The Office determines whether an application is substantially complete and, if so, accepts the application for review.

(c) Applications found by the Office to be incomplete or so speculative as to make review inappropriate will be returned to the applicant with a statement of the reasons therefor.

(d) Once an application is accepted, the Office initiates an appropriate review in light of the specific action requested in the application. Pursuant to section 20 of the Act, the Office shall consult with the Department of Defense on all matters affecting national security and with the Department of State on all matters affecting foreign policy, including the issuance or transfer of each license.

(e) The Office makes a determination on an application as expeditiously as possible but, in the case of a license application, not later than 180 days after receipt of such application. If the Office has not made a determination within 120 days after receipt of such ap-

plication, the Office informs the applicant of any pending issues and of actions required to resolve such issues.

#### §413.11 Modifications.

Applications may be modified, supplemented, or corrected by the applicant at any time prior to issuance of the Office's decision.

#### § 413.13 Issuance of license.

The Office issues or transfers a license authorizing the conduct of commercial space launch activities by the applicant if the Office determines, after review, that the applicant has, and will continue to have, the ability to comply with all requirements for a license, including the ability to conduct safe launch or launch site operations.

## §413.15 Terms and conditions of license.

(a) Each license issued or transferred under this section shall specify the activities authorized by the license, the name of each person responsible under the license for the conduct of such activities, the period of time for which the license is valid, and such other terms and conditions as may be required to protect public safety, the safety of property, and national security and foreign policy interests of the United States.

(b) All licenses shall specify, as a condition of such license, that the licensee maintain an effective on-site means for verifying that the licensed launch activity conforms to representations made in the license application

# §413.17 Certain rights not conferred by license.

No license shall confer any proprietary, property, or exclusive right in the use of any airspace, Federal launch facility, or Federal launch support facility. Issuance of a license does not affect the authority of the Federal Communications Commission under the Communications Act of 1934 (47 U.S.C. 151 et seq.) or the authority of the Secretary of Commerce under the Land Remote-Sensing Commercialization Act of 1984 (15 U.S.C. 4201 et seq).

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# § 413.19 Substantial and significant changes in information furnished to the Office.

(a) Each applicant is responsible for the continuing accuracy and completeness of information furnished to the Office to support a pending application or which formed the basis for any approval, determination or licensing action by the Office. Whenever such information is no longer substantially accurate and complete in all significant respects, or whenever there has been a substantial change as to any matter of decisional significance to the Office, the applicant shall, as promptly as possible, submit a statement furnishing such additional or corrected information as may be appropriate.

(b) Willful false statements made in applications and documents relating to applications or licenses are punishable by fine and imprisonment, U.S. Code, Title 18, Section 1001, and by appropriate administrative sanctions, including license revocation and civil penalties.

#### PART 415—LAUNCH LICENSES

#### Subpart A—General

Sec.

415.1 Scope.

415.3 When a launch license is required.

415.5 Approvals required for a license.

415.7 Incorporation of approvals.

415.9 Standard conditions.

415.10 Registration of space objects.

#### Subpart B-Safety Review

415.11 Scope.

415.13 General standards for reviewing safety operations.

415.15 When to request safety approval.

415.17 Incorporation of safety approval.

#### Subpart C-Mission Review

415.21 Scope.

415.23 When to request mission approval.

415.25 Incorporation of mission approval.

#### Subpart D—Environmental Impacts of Launch Activities

415.31 General.

415.33 Environmental information.

AUTHORITY: 49 U.S.C. app. 2601 note.

Source:  $53\ FR\ 11017$ , Apr. 4, 1988, unless otherwise noted.

#### Subpart A—General

#### §415.1 Scope.

This part contains the procedures and information requirements which apply exclusively to launch license applications and supplements the general application procedures in part 413.

# §415.3 When a launch license is required.

(a) The launch of a launch vehicle from U.S. territory by any person, or from outside U.S. territory by any individual or any corporation, partnership, joint venture, association or other entity organized or existing under the laws of the United States or any state, must be authorized by a license issued under this part.

(b) The launch of a launch vehicle by a foreign corporation or other entity controlled by a United States citizen, as defined in section 401.5 of this Chapter, at any place which is both outside the United States and outside of the territory of any foreign nation when there is no agreement in force between the United States and a foreign nation which provides that such foreign nation shall exercise jurisdiction over such launch, must be authorized by a license issued under this part.

(c) The launch of a launch vehicle by any foreign corporation or other entity described in paragraph (b) of this section from the territory of a foreign nation, when there is in force an agreement between the United States and such foreign nation concerning the exercise of jurisdiction by the United States over such launch, must be authorized by a license issued under this part.

# §415.5 Approvals required for a license.

A license authorizing an unmanned launch is issued or transferred after the Office grants an applicant both mission and safety approvals. These approvals may be requested separately and in advance of a license request, as provided in §§ 415.15 and 415.23 of this subpart.

#### §415.7 Incorporation of approvals.

(a) Any approval or determination made by the Office before a license has

been requested, as provided in §413.5 of this subpart, is made part of the record upon which the Office makes a decision to issue a launch license with conditions or to deny a launch license.

(b) An approval or determination remains valid, and the Office does not reopen any part of a review which formed the basis for an approval or determination, as long as the information submitted as part of the review and other matters of decisional significance to the Office remain accurate and valid.

#### §415.9 Standard conditions.

All launch licenses shall contain those conditions which the Office determines to be necessary and appropriate to protect public health and safety, the safety of property, and national security and foreign policy interests of the United States. Failure to comply with any license condition may be cause for revocation of the license or the initiation of other enforcement actions by the Office. Standard conditions in licenses include requirements for the licensee to do the following:

- (a) Secure at least the minimum amount of third-party liability insurance specified by the Department;
- (b) Adhere strictly to specified range safety regulations and procedures;
- (c) Comply with requirements concerning pre-launch record keeping and notifications, including those pertaining to Federal airspace restrictions and military tracking operations; and
- (d) Comply with Federal inspection, verification and enforcement requirements

[53 FR 11017, Apr. 4, 1988, as amended at 56 FR 41068, Aug. 19, 1991; 58 FR 3827, Jan. 12, 1993]

#### §415.10 Registration of space objects.

(a) In accordance with Article IV of the 1975 Convention on Registration of Objects Launched Into Outer Space, each licensee is responsible for registering all objects placed in space in the course of conducting activities authorized by its license, except for objects owned by a foreign entity. Registration of objects owned by a foreign entity is the responsibility of that foreign entity.

(b) Each licensee shall, within 30 days after launch, submit to the Office the

following information concerning any vehicle or other object it has launched into outer space:

- The international designator of the space object(s);
  - (2) Date and location of launch;
- (3) Basic programmed orbital parameters, including:
  - (i) Nodal period,
  - (ii) Inclination,
  - (iii) Apogee;
- (4) General function of the space object.

#### Subpart B—Safety Review

#### §415.11 Scope.

Safety Review is the procedure for determining whether an applicant can safely conduct the preparation and launch of the proposed launch vehicle and any payload. This review focuses on the elements of an applicant's safety operations, including the proposed launch site, procedure, personnel, and equipment. A safety approval granted by the Office does not confer any approval or authorization an applicant or licensee must obtain from the operator of a Federal or licensed range, or create any presumption or inference that such approval or authorization will be granted.

# §415.13 General standards for reviewing safety operations.

- (a) Launch Site. The location, size and design configuration of the proposed site shall ensure that off-site persons and property are not exposed to an unreasonable risk of harm.
- (b) Procedures. User and range operator procedures must be appropriate for assuring pre-launch check-out and validation of all launch safety systems (ground or flight); control of pre-launch and launch hazards to the public; trajectory flight safety analysis; and safe flight operations from ignition through impact for suborbital launches and through orbital injection or escape velocity for orbital launches.
- (c) Personnel. Range safety personnel shall be qualified and possess appropriate training and experience.
- (d) Equipment. Range safety equipment and instrumentation and vehicle safety systems shall be adequate and appropriate to support safe operations.

#### § 415.15

# §415.15 When to request safety approval.

An application for safety approval may be made as a part of a launch license request or, in the alternative, in advance of a launch license request.

# §415.17 Incorporation of safety approval.

A safety approval made by the Office under this part may be made part of a licensing record pursuant to §415.7 of this Subpart.

#### Subpart C-Mission Review

#### §415.21 Scope.

Mission Review is the procedure for identifying significant issues affecting United States national interests and international obligations that may be associated with a proposed launch. Except for safety operations covered by §§ 415.11-415.17 of this part, Mission Review covers all aspects of a proposed launch, including any payload to be launched. For a payload not subject to FCC or NOAA regulation, the Office must determine whether to prevent launch of the payload because to launch it would jeopardize public health and safety, the safety of property, or any national security or foreign policy interest of the United States.

# §415.23 When to request mission approval.

An application for mission approval, may be made as part of a launch license request or, in the alternative, in advance of a launch license request. Application for a determination on a payload not regulated by the FCC or NOAA may be made as part of or in advance of any other request.

# §415.25 Incorporation of mission approval.

A mission approval or payload determination made by the Office under this part is made part of a licensing record pursuant to §415.7 of this subpart.

#### Subpart D—Environmental Impacts of Launch Activities

#### §415.31 General.

In accordance with the requirements of the National Environmental Policy Act, 42 U.S.C. 4321, et seq., (NEPA), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, 40 CFR parts 1500-1508, and the Department of Transportation's Procedures for Considering Environmental Impacts, DOT Order 5610.1C1, the environmental impacts of licensing commercial launch activities are required to be considered by the Office. The effects of most projected commercial launch activities are already addressed in the Office's programmatic environmental assessment or in environmental impact statements for existing launch sites. The Office will determine whether a proposed launch activity is adequately addressed in these documents. Applicants may be required to provide additional information concerning the environmental effects of a proposed launch activity.

#### §415.33 Environmental information.

Applicants will be required to submit environmental information concerning:

- (a) Proposed new launch sites not covered by existing environmental documentation:
- (b) A proposed new launch vehicle with characteristics falling measurably outside the parameters of existing environmental documentation;
- (c) Proposed launches from established sites involving vehicles with characteristics falling measurably outside the parameters of the existing environmental impact statement covering those sites;
- (d) A proposed payload that may have significant environmental impacts in the event of a launch accident; and

<sup>&</sup>lt;sup>1</sup>This order is available from the Office of Commercial Space Transportation, Department of Transportation, S-50, 400 7th Street SW., Washington, DC 20590.

(e) Other factors as determined by the Office.

#### PART 440—FINANCIAL RESPONSIBILITY

#### Subpart A-Financial Responsibility for **Licensed Launch Activities**

Sec.

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- 440.9 Insurance requirements for licensed launch activities.
- 440.11 Duration of coverage; Modifications.
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- APPENDIX A TO PART 440—INFORMATION RE-QUIREMENTS FOR OBTAINING A MAXIMUM PROBABLE LOSS DETERMINATION FOR LI-CENSED LAUNCH ACTIVITIES
- APPENDIX B TO PART 440—AGREEMENT FOR WAIVER OF CLAIMS AND ASSUMPTION OF RE-

AUTHORITY: 49 U.S.C. 70101-70119; 49 CFR

Source: Docket No. 28635, 63 FR 45619, Aug. 26, 1998, unless otherwise noted.

#### Subpart A—Financial Responsibility for Licensed Launch Activities

#### §440.1 Scope of part.

This part sets forth financial responsibility and allocation of risk requirements applicable to commercial space launch activities that are authorized to be conducted under a launch license issued pursuant to this subchapter.

#### § 440.3 Definitions.

- (a) For purposes of this part—
- (1) Bodily injury means physical injury, sickness, disease, disability, shock, mental anguish, or mental injury sustained by any person, including death.
- (2) Contractors and subcontractors means those entities that are involved at any tier, directly or indirectly, in licensed launch activities, and includes suppliers of property and services, and

the component manufacturers of a launch vehicle or payload.

- (3) Customer means the person who procures launch services from the licensee, any person to whom the customer has sold, leased, assigned, or otherwise transferred its rights in the payload (or any part thereof) to be launched by the licensee, including a conditional sale, lease, assignment, or transfer of rights, any person who has placed property on board the payload for launch or payload services, and any person to whom the customer has transferred its rights to the launch services.
- (4) Federal range facility means a Government-owned installation at which launches take place.
- Financial responsibility means statutorily required financial ability to satisfy liability as required under 49 U.S.C. 70101-70119.
- (6) Government personnel means employees of the United States, its agencies, and its contractors and subcontractors, involved in launch services for licensed launch activities. Employees of the United States include members of the Armed Forces of the United States.
- (7) Hazardous operations means activities, processes, and procedures that, because of the nature of the equipment, facilities, personnel, or environment involved or function being performed, may result in bodily injury or property damage.
- (8) Liability means a legal obligation to pay claims for bodily injury or property damage resulting from licensed launch activities.
- (9) License means an authorization to conduct licensed launch activities, issued by the Office under this subchapter.
- (10) Licensed launch activities means the launch of a launch vehicle as defined in a regulation or license issued by the Office and carried out pursuant to a launch license.
- (11) Maximum probable loss (MPL) means the greatest dollar amount of loss for bodily injury or property damage that is reasonably expected to result from licensed launch activities:
- (i) Losses to third parties, excluding Government personnel and

#### § 440.5

launch participants' employees involved in licensed launch activities, that are reasonably expected to result from licensed launch activities are those having a probability of occurrence on the order of no less than one in ten million.

- (ii) Losses to Government property and Government personnel involved in licensed launch activities that are reasonably expected to result from licensed launch activities are those having a probability of occurrence on the order of no less than one in one hundred thousand.
- (12) Office means the Associate Administrator for Commercial Space Transportation of the Federal Aviation Administration, U.S. Department of Transportation.
- (13) *Property damage* means partial or total destruction, impairment, or loss of tangible property, real or personal.
- (14) Regulations means the Commercial Space Transportation Licensing Regulations, codified at 14 CFR Ch. III.
  - (15) *Third party* means:
  - (i) Any person other than:
- (A) The United States, its agencies, and its contractors and subcontractors involved in launch services for licensed launch activities;
- (B) The licensee and its contractors and subcontractors involved in launch services for licensed launch activities; and
- (C) The customer and its contractors and subcontractors involved in launch services for licensed launch activities.
- (ii) Government personnel, as defined in this section, are third parties.
- (16) *United States* means the United States Government, including its agencies.
- (b) Except as otherwise provided in this section, any term used in this part and defined in 49 U.S.C. 70101-70119, or in §401.5 of this chapter shall have the meaning contained therein.

#### §440.5 General.

(a) No person shall commence or conduct launch activities that require a license unless that person has obtained a license and fully demonstrated compliance with the financial responsibility and allocation of risk requirements set forth in this part.

- (b) The Office shall prescribe the amount of financial responsibility a licensee is required to obtain and any additions to or modifications of the amount in a license order issued concurrent with or subsequent to the issuance of a license.
- (c) Demonstration of financial responsibility under this part shall not relieve the licensee of ultimate responsibility for liability, loss, or damage sustained by the United States resulting from licensed launch activities, except to the extent that:
- (1) Liability, loss, or damage sustained by the United States results from willful misconduct of the United States or its agents;
- (2) Covered claims of third parties for bodily injury or property damage arising out of any particular launch exceed the amount of financial responsibility required under §440.9(c) of this part and do not exceed \$1,500,000,000 (as adjusted for inflation occurring after January 1, 1989) above such amount, and are payable pursuant to 49 U.S.C. 70113 and §440.19 of this part. Claims of employees of entities listed §440.3(a)(15)(i)(B) and (C) of this part for bodily injury or property damage are not covered claims;
- (3) Covered claims for property loss or damage exceed the amount of financial responsibility required under §440.9(e) of this part and do not result from willful misconduct of the licensee; or
- (4) The licensee has no liability for covered claims by third parties for bodily injury or property damage arising out of any particular launch that exceed \$1,500,000,000 (as adjusted for inflation occurring after January 1, 1989) above the amount of financial responsibility required under §440.9(c) of this part.
- (d) A licensee's failure to comply with the requirements in this part may result in suspension or revocation of a license, and subjects the licensee to civil penalties as provided in part 405 of this chapter.

## § 440.7 Determination of maximum probable loss.

(a) The Office shall determine the maximum probable loss (MPL) from covered claims by a third party for

bodily injury or property damage, and the United States, its agencies, and its contractors and subcontractors for covered property damage or loss, resulting from licensed launch activities. The maximum probable loss determination forms the basis for financial responsibility requirements issued in a license order.

(b) The Office issues its determination of maximum probable loss no later than ninety days after a licensee or transferee has requested a determination and submitted all information required by the Office to make the determination. The Office shall consult with Federal agencies that are involved in, or whose personnel or property are exposed to risk of damage or loss as a result of, licensed launch activities before issuing a license order prescribing financial responsibility requirements and shall notify the licensee or transferee if interagency consultation may delay issuance of the MPL determination.

(c) Information requirements for obtaining a maximum probable loss determination are set forth in Appendix A of this part. Any person requesting a determination of maximum probable loss must submit information in accordance with Appendix A requirements, unless the Office has waived requirements. In lieu of submitting required information, a person requesting a maximum probable loss determination may designate and certify certain information previously submitted for a prior determination as complete, valid, and equally applicable to its current request. The requester is responsible for the continuing accuracy and completeness of information submitted under this part and shall promptly report any changes in writ-

(d) The Office shall amend a determination of maximum probable loss required under this section at any time prior to completion of licensed launch activities as warranted by supplementary information provided to or obtained by the Office after the MPL determination is issued. Any change in financial responsibility requirements as a result of an amended MPL determination shall be set forth in a license order.

(e) The Office may make a determination of maximum probable loss at any time other than as set forth in paragraph (b) of this section upon request by any person.

[Doc. No. 28635, 63 FR 45619, Aug. 26, 1998; 63 FR 55175, Oct. 14, 1998]

# §440.9 Insurance requirements for licensed launch activities.

(a) As a condition of each launch license, the licensee must comply with insurance requirements set forth in this section and in a license order issued by the Office, or otherwise demonstrate the required amount of financial responsibility.

(b) The licensee must obtain and maintain in effect a policy or policies of liability insurance, in an amount determined by the Office under paragraph (c) of this section, that protects the following persons as additional insureds to the extent of their respective potential liabilities against covered claims by a third party for bodily injury or property damage resulting from licensed launch activities:

(1) The licensee, its customer, and their respective contractors and subcontractors, and the employees of each, involved in licensed launch activities;

(2) The United States, its agencies, and its contractors and subcontractors involved in licensed launch activities; and

(3) Government personnel.

(c) The Office shall prescribe for each licensee the amount of insurance required to compensate the total of covered third-party claims for bodily injury or property damage resulting from licensed launch activities in connection with any particular launch. Covered third-party claims include claims by the United States, its agencies, and its contractors and subcontractors for damage or loss to property other than property for which insurance is required under paragraph (d) of this section. The amount of insurance required is based upon the Office's determination of maximum probable loss; however, it will not exceed the lesser of:

(1) \$500 million; or

(2) The maximum liability insurance available on the world market at a reasonable cost, as determined by the Office.

#### § 440.11

- (d) The licensee must obtain and maintain in effect a policy or policies of insurance, in an amount determined by the Office under paragraph (e) of this section, that covers claims by the United States, its agencies, and its contractors and subcontractors involved in licensed launch activities for property damage or loss resulting from licensed launch activities. Property covered by this insurance must include all property owned, leased, or occupied by, or within the care, custody, or control of, the United States and its agencies, and its contractors and subcontractors involved in licensed launch activities, at a Federal range facility. Insurance must protect the United States and its agencies, and its contractors and subcontractors involved in licensed launch activities.
- (e) The Office shall prescribe for each licensee the amount of insurance required to compensate claims for property damage under paragraph (d) of this section resulting from licensed launch activities in connection with any particular launch. The amount of insurance is based upon a determination of maximum probable loss; however, it will not exceed the lesser of:
  - (1) \$100 million; or
- (2) The maximum available on the world market at a reasonable cost, as determined by the Office.
- (f) In lieu of a policy of insurance, a licensee may demonstrate financial responsibility in another manner meeting the terms and conditions applicable to insurance as set forth in this part. The licensee must describe in detail the method proposed for demonstrating financial responsibility and how it assures that the licensee is able to cover claims as required under this part.

# §440.11 Duration of coverage; modifications.

- (a) Insurance coverage required under §440.9, or other form of financial responsibility, shall attach upon commencement of licensed launch activities, and remain in full force and effect as follows:
- (1) Until completion of licensed launch activities at the launch site; and

- (2) For orbital launches, until the later of—
- (i) Thirty days following payload separation, or attempted payload separation in the event of a payload separation anomaly; or
- (ii) Thirty days from ignition of the launch vehicle.
- (3) For suborbital launches, until the later of—
- (i) Motor impact and payload recovery; or
- (ii) The Office's determination that risk to third parties and Government property as a result of licensed launch activities is sufficiently small that financial responsibility is no longer necessary, as determined by the Office through the risk analysis conducted before the launch to determine MPL and specified in a license order.
- (b) Financial responsibility required under this part may not be replaced, canceled, changed, withdrawn, or in any way modified to reduce the limits of liability or the extent of coverage, nor expire by its own terms, prior to the time specified in a license order, unless the Office is notified at least 30 days in advance and expressly approves the modification.

# §440.13 Standard conditions of insurance coverage.

- (a) Insurance obtained under §440.9 shall comply with the following terms and conditions of coverage:
- (1) Bankruptcy or insolvency of an insured, including any additional insured, shall not relieve the insurer of any of its obligations under any policy.
- (2) Policy limits shall apply separately to each occurrence and, for each occurrence to the total of claims arising out of licensed launch activities in connection with any particular launch.
- (3) Except as provided herein, each policy must pay claims from the first dollar of loss, without regard to any deductible, to the limits of the policy. A licensee may obtain a policy containing a deductible amount if the amount of the deductible is placed in an escrow account or otherwise demonstrated to be unobligated, unencumbered funds of the licensee, available to compensate claims at any time claims may arise.

- (4) Each policy shall not be invalidated by any action or inaction of the licensee or any additional insured, including nonpayment by the licensee of the policy premium, and must insure the licensee and each additional insured regardless of any breach or violation of any warranties, declarations, or conditions contained in the policies by the licensee or any additional insured (other than a breach or violation by the licensee or an additional insured, and then only as against that licensee or additional insured).
- (5) Exclusions from coverage must be specified.
- (6) Insurance shall be primary without right of contribution from any other insurance that is carried by the licensee or any additional insured.
- (7) Each policy must expressly provide that all of its provisions, except the policy limits, operate in the same manner as if there were a separate policy with and covering the licensee and each additional insured.
- (8) Each policy must be placed with an insurer of recognized reputation and responsibility that is licensed to do business in any State, territory, possession of the United States, or the District of Columbia.
- (9) Except as to claims resulting from the willful misconduct of the United States or its agents, the insurer shall waive any and all rights of subrogation against each of the parties protected by required insurance.
  - (b) [Reserved.]

#### §440.15 Demonstration of compliance.

- (a) A licensee must submit evidence of financial responsibility and compliance with allocation of risk requirements under this part, as follows, unless a license order specifies otherwise due to the proximity of the licensee's intended date for commencement of licensed launch activities:
- (1) The three-party reciprocal waiver of claims agreement required under §440.17(c) of this part must be submitted at least 30 days before commencement of licensed launch activities involving the customer that will sign the agreement:
- (2) Evidence of insurance must be submitted at least 30 days before com-

- mencement of licensed launch activities:
- (3) Evidence of financial responsibility in a form other than insurance, as provided under §440.9(f) of this part, must be submitted at least 60 days before commencement of licensed launch activities; and
- (4) Evidence of renewal of insurance or other form of financial responsibility must be submitted at least 30 days in advance of its expiration date.
- (b) Upon a complete demonstration of compliance with financial responsibility and allocation of risk requirements under this part, the requirements shall preempt any provisions in agreements between the licensee and an agency of the United States governing access to or use of United States launch property or launch services for licensed launch activities which address financial responsibility, allocation of risk and related matters covered by 49 U.S.C. 70112, 70113.
- (c) A licensee must demonstrate compliance as follows:
- (1) The licensee must provide proof of insurance required under § 440.9 by:
- (i) Certifying to the Office that it has obtained insurance in compliance with the requirements of this part and any applicable license order;
- (ii) Filing with the Office one or more certificates of insurance evidencing insurance coverage by one or more insurers under a currently effective and properly endorsed policy or policies of insurance, applicable to licensed launch activities, on terms and conditions and in amounts prescribed under this part, and specifying policy exclusions;
- (iii) In the event of any policy exclusions or limitations of coverage that may be considered usual under § 440.19(c) of this part, or for purposes of implementing the Government's waiver of claims for property damage under 49 U.S.C. 70112(b)(2), certifying that insurance covering the excluded risks is not commercially available at reasonable cost: and
- (iv) Submitting to the Office, for signature by the Department on behalf of the United States Government, the waiver of claims and assumption of responsibility agreement required by

§440.17(c) of this part, executed by the licensee and its customer.

- (2) Certifications required under this section must be signed by a duly authorized officer of the licensee.
- (d) Certificate(s) of insurance required under paragraph (c)(1)(ii) of this section must be signed by the insurer issuing the policy and accompanied by an opinion of the insurance broker that the insurance obtained by the licensee complies with the specific requirements for insurance set forth in this part and any applicable license order.
- (e) The licensee must maintain, and make available for inspection by the Office upon request, all required policies of insurance and other documents necessary to demonstrate compliance with this part.
- (f) In the event the licensee demonstrates financial responsibility using means other than insurance, as provided under §440.9(f) of this part, the licensee must provide proof that it has met the requirements set forth in this part and in a license order issued by the Office.

# §440.17 Reciprocal waiver of claims requirements.

- (a) As a condition of each launch license, the licensee shall comply with reciprocal waiver of claims requirements as set forth in this section.
- (b) The licensee shall implement reciprocal waivers of claims with its contractors and subcontractors, its customer(s) and the customer's contractors and subcontractors, under which each party waives and releases claims against the other parties to the waivers and agrees to assume financial responsibility for property damage it sustains and for bodily injury or property damage sustained by its own employees, and to hold harmless and indemnify each other from bodily injury or property damage sustained by its employees, resulting from licensed launch activities, regardless of fault.
- (c) For each licensed launch in which the U.S. Government, its agencies, or its contractors and subcontractors is involved in licensed launch activities or where property insurance is required under §440.9(d) of this part, the Federal Aviation Administration of the Department of Transportation, the licensee,

and its customer shall enter into a three-party reciprocal waiver of claims agreement in the form set forth in Appendix II to this part or that satisfies its requirements.

(d) The licensee, its customer, and the Federal Aviation Administration of the Department of Transportation on behalf of the United States and its agencies but only to the extent provided in legislation, must agree in any waiver of claims agreement required under this part to indemnify another party to the agreement from claims by the indemnifying party's contractors and subcontractors arising out of the indemnifying party's failure to implement properly the waiver requirement.

# §440.19 United States payment of excess third-party liability claims.

- (a) The United States pays successful covered claims (including reasonable expenses of litigation or settlement) of a third party against the licensee, the customer, and the contractors and subcontractors of the licensee and the customer, and the employees of each involved in licensed launch activities, and the contractors and subcontractors of the United States and its agencies, and their employees, involved in licensed launch activities to the extent provided in an appropriation law or other legislative authority providing for payment of claims in accordance with 49 U.S.C. 70113, and to the extent the total amount of such covered claims arising out of any particular launch:
- (1) Exceeds the amount of insurance required under \$440.9(b); and
- (2) Is not more than \$1,500,000,000 (as adjusted for inflation occurring after January 1, 1989) above that amount.
- (b) Payment by the United States under paragraph (a) of this section shall not be made for any part of such claims for which bodily injury or property damage results from willful misconduct by the party seeking payment.
- (c) The United States shall provide for payment of claims by third parties for bodily injury or property damage that are payable under 49 U.S.C. 70113 and not covered by required insurance under §440.9(b), without regard to the limitation under paragraph (a)(1) of this section, because of an insurance

policy exclusion that is usual. A policy exclusion is considered usual only if insurance covering the excluded risk is not commercially available at reasonable rates. The licensee must submit a certification in accordance with §440.15(c)(1)(iii) of this part for the United States to cover the claims.

- (d) Upon the expiration of the policy period prescribed in accordance with §440.11(a), the United States shall provide for payment of claims that are payable under 49 U.S.C. 70113 from the first dollar of loss up to \$1,500,000,000 (as adjusted for inflation occurring after January 1, 1989).
- (e) Payment by the United States of excess third-party claims under 49 U.S.C. 70113 shall be subject to:
- (1) Prompt notice by the licensee to the Office that the total amount of claims arising out of licensed launch activities exceeds, or is likely to exceed, the required amount of financial responsibility. For each claim, the notice must specify the nature, cause, and amount of the claim or lawsuit associated with the claim, and the party or parties who may otherwise be liable for payment of the claim;
- (2) Participation or assistance in the defense of the claim or lawsuit by the United States, at its election;
- (3) Approval by the Office of any settlement, or part of a settlement, to be paid by the United States; and
- (4) Approval by Congress of a compensation plan prepared by the Office and submitted by the President.
  - (f) The Office will:
- (1) Prepare a compensation plan outlining the total amount of claims and meeting the requirements set forth in 49 U.S.C. 70113;
- (2) Recommend sources of funds to pay the claims; and
- (3) Propose legislation as required to implement the plan.
- (g) The Office may withhold payment of a claim if it finds that the amount is unreasonable, unless it is the final order of a court that has jurisdiction over the matter.

APPENDIX A TO PART 440—INFORMATION REQUIREMENTS FOR OBTAINING A MAXIMUM PROBABLE LOSS DETER-MINATION FOR LICENSED LAUNCH AC-TIVITIES

Any person requesting a maximum probable loss determination shall submit the following information to the Office, unless the Office has waived a particular information requirement under 14 CFR 440.7(c):

#### I. GENERAL INFORMATION

- A. Mission description.
- 1. A description of mission parameters, including:
  - a. Launch trajectory;
  - b. Orbital inclination; and
  - c. Orbit altitudes (apogee and perigee).
- 2. Flight sequence.
- 3. Staging events and the time for each event.
  - 4. Impact locations.
- Identification of the launch range facility, including the launch complex on the range, planned date of launch, and launch windows.
- 6. If the applicant has previously been issued a license to conduct launch activities using the same launch vehicle from the same launch range facility, a description of any differences planned in the conduct of proposed activities.
- B. Launch Vehicle Description.
- General description of the launch vehicle and its stages, including dimensions.
- 2. Description of major systems, including safety systems.
- 3. Description of rocket motors and type of fuel used.
- 4. Identification of all propellants to be used and their hazard classification under the Hazardous Materials Table, 49 CFR 172.101.
  - 5. Description of hazardous components.
  - C. Payload.
- 1. General description of the payload, including type (e.g., telecommunications, remote sensing), propellants, and hazardous components or materials, such as toxic or radioactive substances.
  - D. Flight Termination System.
- 1. Identification of any flight termination system (FTS) on the launch vehicle, including a description of operations and component location on the vehicle.

#### II. PRE-FLIGHT PROCESSING OPERATIONS

A. General description of pre-flight operations including vehicle processing consisting of an operational flow diagram showing the overall sequence and location of operations, commencing with arrival of vehicle components at the launch range facility

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through final safety checks and countdown sequence, and designation of hazardous operations, as defined in 14 CFR 440.3. For purposes of these information requirements, payload processing, as opposed to integration, is not a hazardous operation.

B. For each hazardous operation, including but not limited to fueling, solid rocket motor build-up, ordnance installation, ordnance checkout, movement of hazardous materials, and payload integration:

1. Identification of location where each operation will be performed, including each building or facility identified by name or number.

2. Identification of facilities adjacent to the location where each operation will be performed and therefore exposed to risk, identified by name or number.

3. Maximum number of Government personnel and individuals not involved in licensed launch activities who may be exposed to risk during each operation. For Government personnel, identification of his or her employer.

4. Identification of launch range facility policies or requirements applicable to the conduct of operations.

#### III. FLIGHT OPERATIONS

A. Identification of launch range facilities exposed to risk during launch vehicle lift-off and flight.

B. Identification of accident failure scenarios, probability assessments for each, and estimation of risks to Government personnel, individuals not involved in licensed launch activities, and Government property, due to property damage or bodily injury. The estimation of risks for each scenario shall take into account the number of such individuals at risk as a result of lift-off and flight of a launch vehicle (on-range, offrange, and down-range) and specific, unique facilities exposed to risk. Scenarios shall cover the range of launch trajectories, inclinations and orbits for which authorization is sought in the license application.

C. On-orbit risk analysis assessing risks posed by a launch vehicle to operational satellites.

D. Reentry risk analysis assessing risks to Government personnel and individuals not involved in licensed launch activities as a result of reentering debris or reentry of the launch vehicle or its components.

E. Trajectory data as follows: Nominal and 3-sigma lateral trajectory data in x, y, z and x (dot), y (dot), z (dot) coordinates in one-second intervals, data to be pad-centered with x being along the initial launch azimuth and continuing through impact for suborbital flights, and continuing through orbital insertion or the end of powered flight for orbital flights.

F. Tumble-turn data for guided vehicles only, as follows: For vehicles with gimbaled

nozzles, tumble turn data with zeta angles and velocity magnitudes stated. A separate table is required for each combination of fail times (every two to four seconds), and significant nozzle angles (two or more small angles, generally between one and five degrees).

G. Identification of debris lethal areas and the projected number and ballistic coefficient of fragments expected to result from flight termination, initiated either by command or self-destruct mechanism, for lift-off, land overflight, and reentry.

#### IV. POST-FLIGHT PROCESSING OPERATIONS

A. General description of post-flight ground operations including overall sequence and location of operations for removal of vehicle components and processing equipment from the launch range facility and for handling of hazardous materials, and designation of hazardous operations.

B. Identification of all facilities used in conducting post-flight processing operations.

C. For each hazardous operation:

1. Identification of location where each operation is performed, including each building or facility identified by name or number.

2. Identification of facilities adjacent to location where each operation is performed and exposed to risk, identified by name or number.

3. Maximum number of Government personnel and individuals not involved in licensed launch activities who may be exposed to risk during each operation. For Government personnel, identification of his or her employer.

4. Identification of launch range facility policies or requirements applicable to the conduct of operations.

APPENDIX B TO PART 440—AGREEMENT FOR WAIVER OF CLAIMS AND AS-SUMPTION OF RESPONSIBILITY

THIS AGREEMENT is entered into this day of \_\_\_\_\_, by and among [Licensee] (the "Licensee"), [Customer] (the "Customer") and the Federal Aviation Administration of the Department of Transportation, on behalf of the United States Government (collectively, the "Parties"), to implement the provisions of section 440.17(c) of the Commercial Space Transportation Licensing Regulations, 14 CFR Ch. III (the "Regulations").

In consideration of the mutual releases and promises contained herein, the Parties hereby agree as follows:

#### 1. Definitions

Customer means the above-named Customer on behalf of the Customer, any person to whom the Customer has sold, leased, assigned, or otherwise transferred its rights in

the payload (or any part thereof) to be launched by the licensee, including a conditional sale, lease, assignment, or transfer of rights, any person who has placed property on board the payload for launch or payload services, and any person to whom the Customer has transferred its rights to the launch services.

License means License No. \_\_\_\_\_\_ issued on \_\_\_\_\_, by the Associate Administrator for Commercial Space Transportation, Federal Aviation Administration, Department of Transportation, to the Licensee, including all license orders issued in connection with the License.

Licensee means the Licensee and any transferee of the Licensee under 49 U.S.C. Subtitle IX. ch. 701.

*United States* means the United States and its agencies involved in Licensed Launch Activities

Except as otherwise defined herein, terms used in this Agreement and defined in 49 U.S.C. Subtitle IX, ch. 701—Commercial Space Launch Activities, or in the Regulations, shall have the same meaning as contained in 49 U.S.C. Subtitle IX, ch. 701, or the Regulations, respectively.

#### 2. WAIVER AND RELEASE OF CLAIMS

(a) Licensee hereby waives and releases claims it may have against Customer and the United States, and against their respective Contractors and Subcontractors, for Property Damage it sustains and for Bodily Injury or Property Damage sustained by its own employees, resulting from Licensed Launch Activities, regardless of fault.

(b) Customer hereby waives and releases claims it may have against Licensee and the United States, and against their respective Contractors and Subcontractors, for Property Damage it sustains and for Bodily Injury or Property Damage sustained by its own employees, resulting from Licensed Launch Activities, regardless of fault.

(c) The United States hereby waives and releases claims it may have against Licensee and Customer, and against their respective Contractors and Subcontractors, for Property Damage it sustains, and for Bodily Injury or Property Damage sustained by its own employees, resulting from Licensed Launch Activities, regardless of fault, to the extent that claims it would otherwise have for such damage or injury exceed the amount of insurance or demonstration of financial responsibility required under sections 440.9(c) and (e), respectively, of the Regulations, 14 CFR 440.9(c) and (e).

#### 3. Assumption of Responsibility

(a) Licensee and Customer shall each be responsible for Property Damage it sustains and for Bodily Injury or Property Damage sustained by its own employees, resulting

from Licensed Launch Activities, regardless of fault. Licensee and Customer shall each hold harmless and indemnify each other, the United States, and the Contractors and Subcontractors of each Party, for Bodily Injury or Property Damage sustained by its own employees, resulting from Licensed Launch Activities, regardless of fault.

(b) The United States shall be responsible for Property Damage it sustains, and for Bodily Injury or Property Damage sustained by its own employees, resulting from Licensed Launch Activities, regardless of fault, to the extent that claims it would otherwise have for such damage or injury exceed the amount of insurance or demonstration of financial responsibility required under section 440.9(c) and (e), respectively, of the Regulations, 14 CFR 440.9(c) and (e).

## 4. EXTENSION OF ASSUMPTION OF RESPONSIBILITY AND WAIVER

(a) Licensee shall extend the requirements of the waiver and release of claims, and the assumption of responsibility, hold harmless, and indemnification, as set forth in paragraphs 2(a) and 3(a), respectively, to its Contractors and Subcontractors by requiring them to waive and release all claims they may have against Customer and the United States, and against the respective Contractors and Subcontractors of each, and to agree to be responsible, for Property Damage they sustain and to be responsible, hold harmless and indemnify Customer and the United States, and the respective Contractors and Subcontractors of each, for Bodily Injury or Property Damage sustained by their own employees, resulting from Licensed Launch Activities, regardless of fault.

(b) Customer shall extend the requirements of the waiver and release of claims, and the assumption of responsibility, hold harmless, and indemnification, as set forth in paragraphs 2(b) and 3(a), respectively, to its Contractors and Subcontractors by requiring them to waive and release all claims they may have against Licensee and the United States, and against the respective Contractors and Subcontractors of each, and to agree to be responsible, for Property Damage they sustain and to be responsible, hold harmless and indemnify Licensee and the United States, and the respective Contractors and Subcontractors of each, for Bodily Injury or Property Damage sustained by their own employees, resulting from Licensed Launch Activities, regardless of fault.

(c) The United States shall extend the requirements of the waiver and release of claims, and the assumption of responsibility as set forth in paragraphs 2(c) and 3(b), respectively, to its Contractors and Subcontractors by requiring them to waive and release all claims they may have against Licensee and Customer, and against the respective Contractors and Subcontractors of each,

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and to agree to be responsible, for any Property Damage they sustain and for any Bodily Injury or Property Damage sustained by their own employees, resulting from Licensed Launch Activities, regardless of fault, to the extent that claims they would otherwise have for such damage or injury exceed the amount of insurance or demonstration of financial responsibility required under section 440.9(c) and (e), respectively, of the Regulations, 14 CFR 440.9(c) and (e).

#### 5. Indemnification

(a) Licensee shall hold harmless and indemnify Customer and its directors, officers, servants, agents, subsidiaries, employees and assignees, or any or them, and the United States and its agencies, servants, agents, subsidiaries, employees and assignees, or any or them, from and against liability, loss or damage arising out of claims that Licensee's Contractors and Subcontractors may have for Property Damage sustained by them and for Bodily Injury or Property Damage sustained by their employees, resulting from Licensed Launch Activities.

(b) Customer shall hold harmless and indemnify Licensee and its directors, officers, servants, agents, subsidiaries, employees and assignees, or any or them, and the United States and its agencies, servants, agents, subsidiaries, employees and assignees, or any of them, from and against liability, loss or damage arising out of claims that Customer's Contractors and Subcontractors, or any person on whose behalf Customer enters into this Agreement, may have for Property Damage sustained by them and for Bodily Injury or Property Damage sustained by their employees, resulting from Licensed Launch Activities.

(c) To the extent provided in advance in an appropriations law or to the extent there is enacted additional legislative authority providing for the payment of claims, the United States shall hold harmless and indemnify Licensee and Customer and their respective directors, officers, servants, agents, subsidiaries, employees and assignees, or any of them, from and against liability, loss or damage arising out of claims that Contractors and Subcontractors of the United States may have for Property Damage sustained by them, and for Bodily Injury or Property Damage sustained by their employees, resulting from Licensed Launch Activities, to the extent that claims they would otherwise have for such damage or injury exceed the amount of insurance or demonstration of financial responsibility required under sections 440.9(c) and (e), respectively, of the Regulations, 14 CFR 440.9(c) and (e).

#### 6. Assurances Under 49 U.S.C. 70112(E)

Notwithstanding any provision of this Agreement to the contrary, Licensee shall

hold harmless and indemnify the United States and its agencies, servants, agents, employees and assignees, or any of them. from and against liability, loss or damage arising out of claims for Bodily Injury or Property Damage, resulting from Licensed Launch Activities, regardless of fault, except to the extent that: (i) as provided in section 7(b) of this Agreement, claims result from willful misconduct of the United States or its agents; (ii) claims for Property Damage sustained by the United States or its Contractors and Subcontractors exceed the amount of insurance or demonstration of financial responsibility required under section 440.9(e) of the Regulations (14 CFR 440.9(e)); (iii) claims by a Third Party for Bodily Injury or Property Damage exceed the amount of insurance or demonstration of financial responsibility required under section 440.9(c) of the Regulations (14 CFR 440.9(c)), and do not exceed \$1,500,000,000 (as adjusted for inflation after January 1, 1989) above such amount, and are payable pursuant to the provisions of 49 U.S.C. 70113 and section 440.19 of the Regulations (14 CFR 440.19); or (iv) Licensee has no liability for claims exceeding \$1,500,000,000 (as adjusted for inflation after January 1, 1989) above the amount of insurance or demonstration of financial responsibility required under section 440.9(c) of the Regulations (14 CFR 440.9(c)).

#### 7. MISCELLANEOUS

(a) Nothing contained herein shall be construed as a waiver or release by Licensee, Customer or the United States of any claim by an employee of the Licensee, Customer or the United States, respectively, including a member of the Armed Forces of the United States, for Bodily Injury or Property Damage, resulting from Licensed Launch Activities.

(b) Notwithstanding any provision of this Agreement to the contrary, any waiver, release, assumption of responsibility or agreement to hold harmless and indemnify herein shall not apply to claims for Bodily Injury or Property Damage resulting from willful misconduct of any of the Parties, the Contractors and Subcontractors of any of the Parties, and in the case of Licensee and Customer and the Contractors and Subcontractors of each of them, the directors, officers, agents and employees of any of the foregoing, and in the case of the United States, its agents.

(c) In the event that more than one customer is involved in Licensed Launch Activities, references herein to Customer shall apply to, and be deemed to include, each such customer severally and not jointly.

(d) This Agreement shall be governed by and construed in accordance with United States Federal law.

IN WITNESS WHEREOF, the Parties to

IN WITNESS WHEREOF, the Parties to this Agreement have caused the Agreement

Commercial Space Transportation, FAA	, DOT Pts. 441–1199
to be duly executed by their respective duly	Its:
authorized representatives as of the date written above.	DEPARTMENT OF TRANSPORTATION
LICENSEE	By: Its:
By: Its:	[Doc. No. 28635, 63 FR 45619, Aug. 26, 1998; 63 FR 55175, Oct. 14, 1998]
CUSTOMER By:	PARTS 441-1199 [RESERVED]